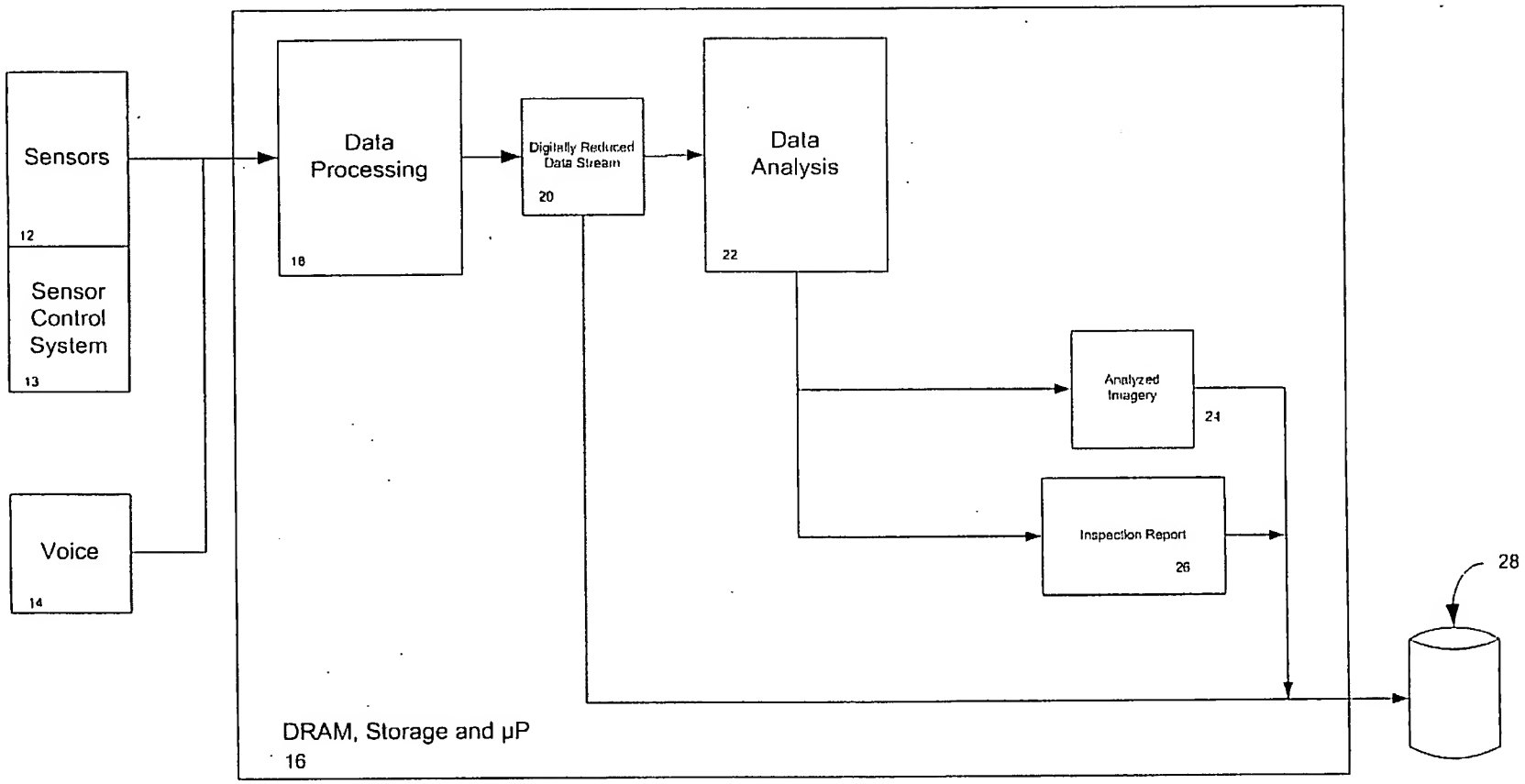

Sensors
12
Sensor Control System
13
Voice
14
Data Processing
18
Digitally Reduced Data Stream
20
Data Analysis
22
Analyzed Imagery
24
Inspection Report
26
28
DRAM, Storage and µP
16

FIGURE 1

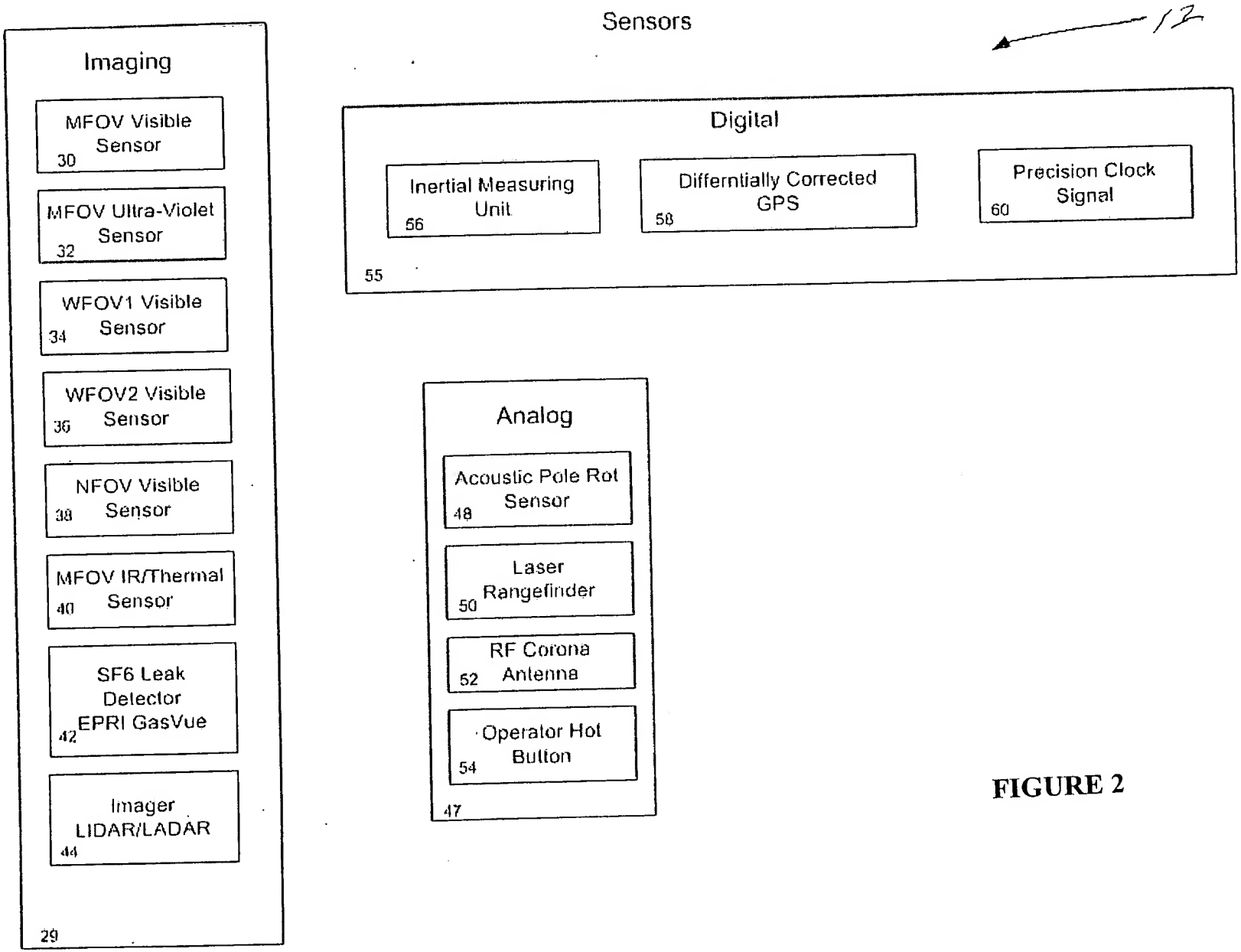

Sensors
12
Imaging
MFOV Visible Sensor
30
MFOV Ultra-Violet Sensor
32
WFOV1 Visible Sensor
34
WFOV2 Visible Sensor
36
NFOV Visible Sensor
38
MFOV IR/Thermal Sensor
40
SF6 Leak Detector EPRI GasVue
42
Imager LIDAR/LADAR
44
29
Digital
Inertial Measuring Unit
56
Differntially Corrected GPS
58
Precision Clock Signal
60
55
Analog
Acoustic Pole Rot Sensor
48
Laser Rangefinder
50
RF Corona Antenna
52
Operator Hot Button
54
47

FIGURE 2

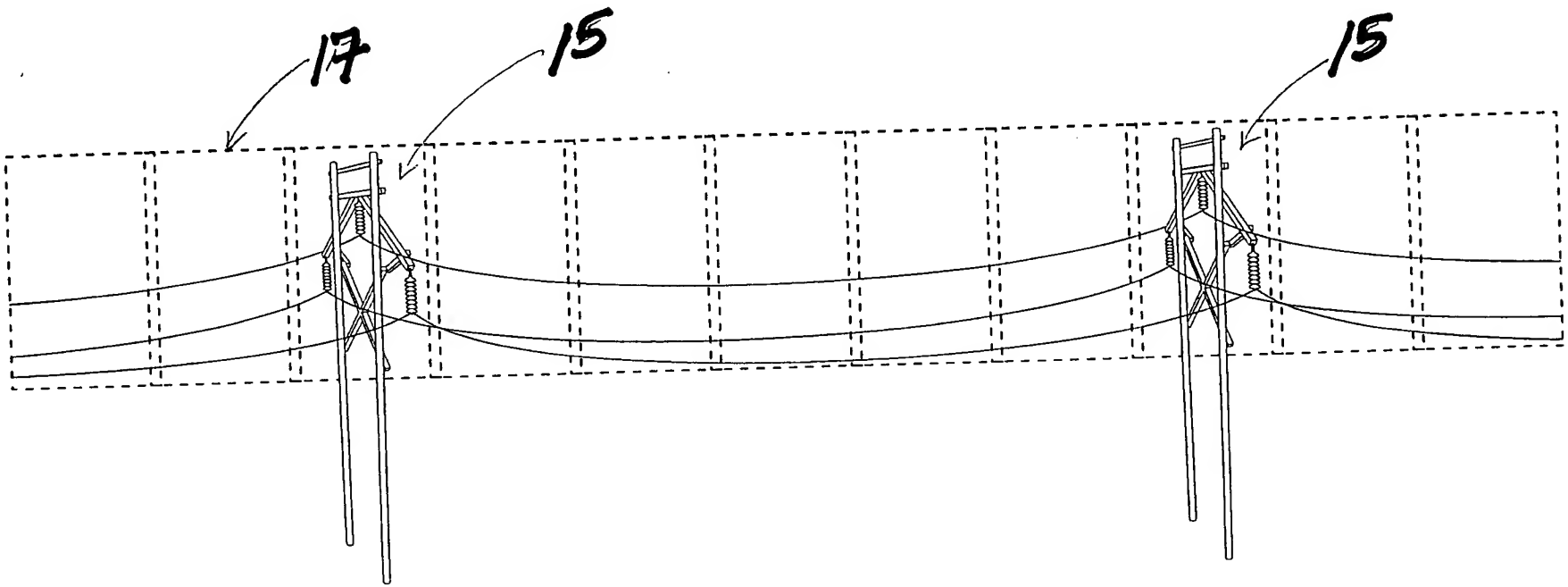


FIGURE 2A

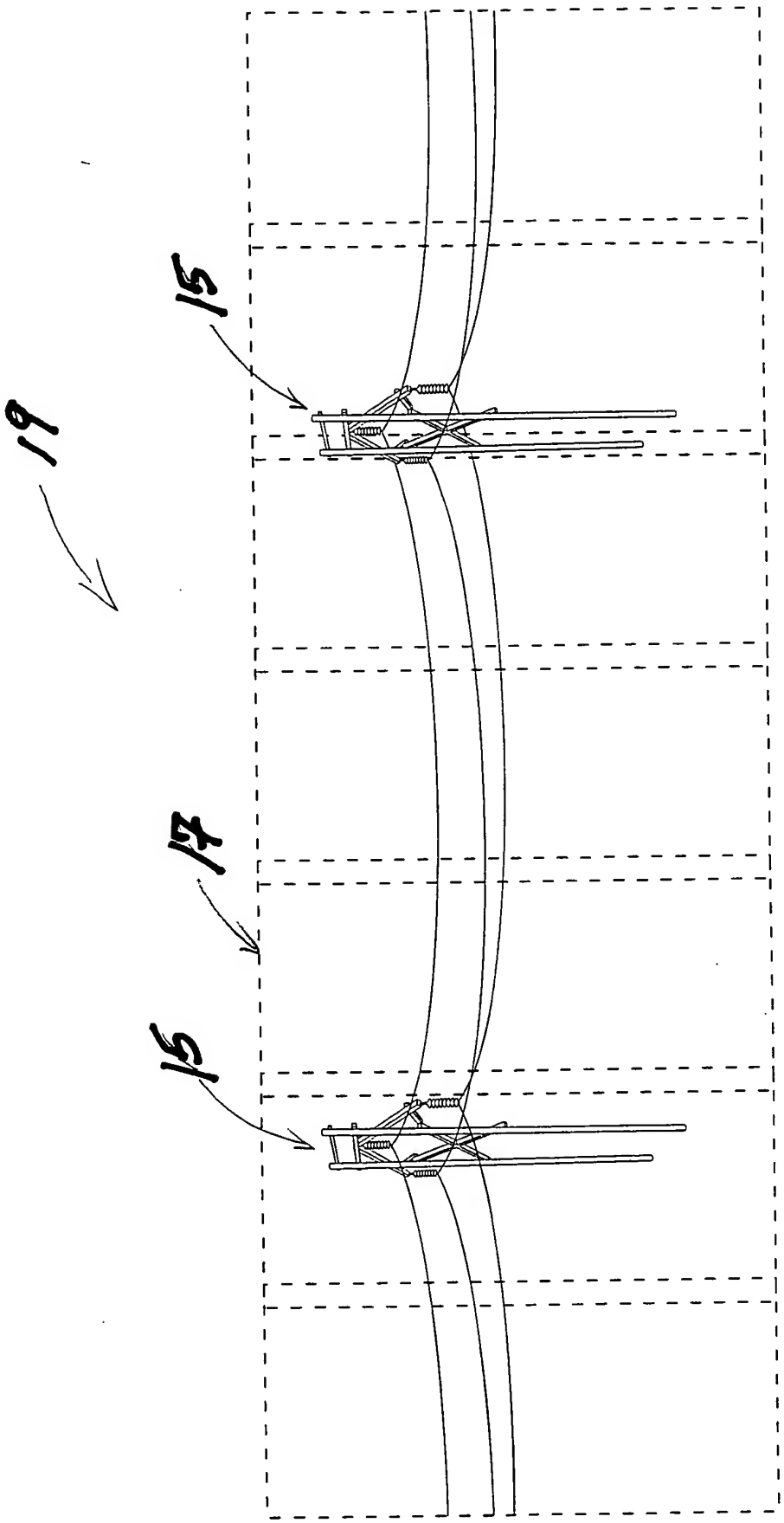


FIGURE 2B

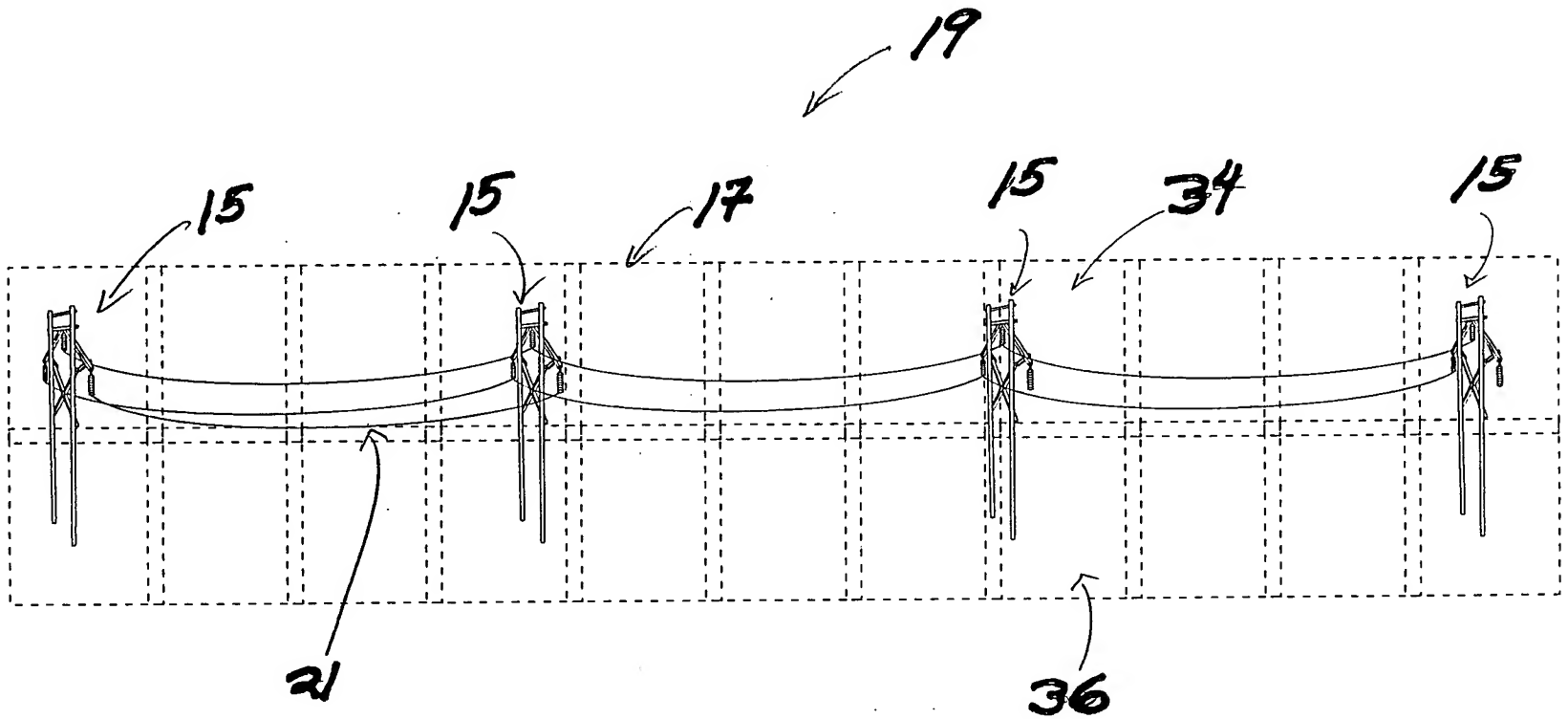


FIGURE 2C

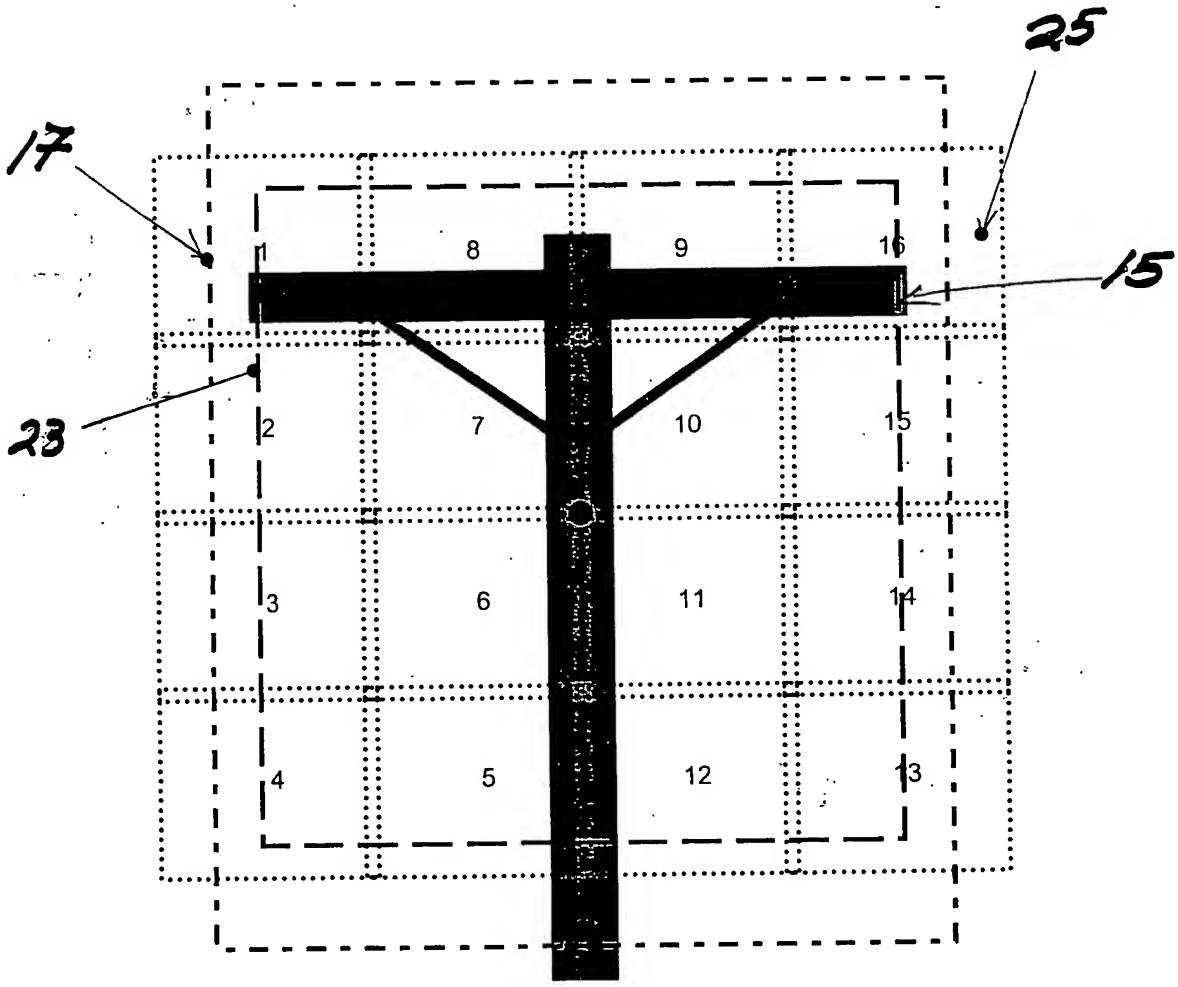
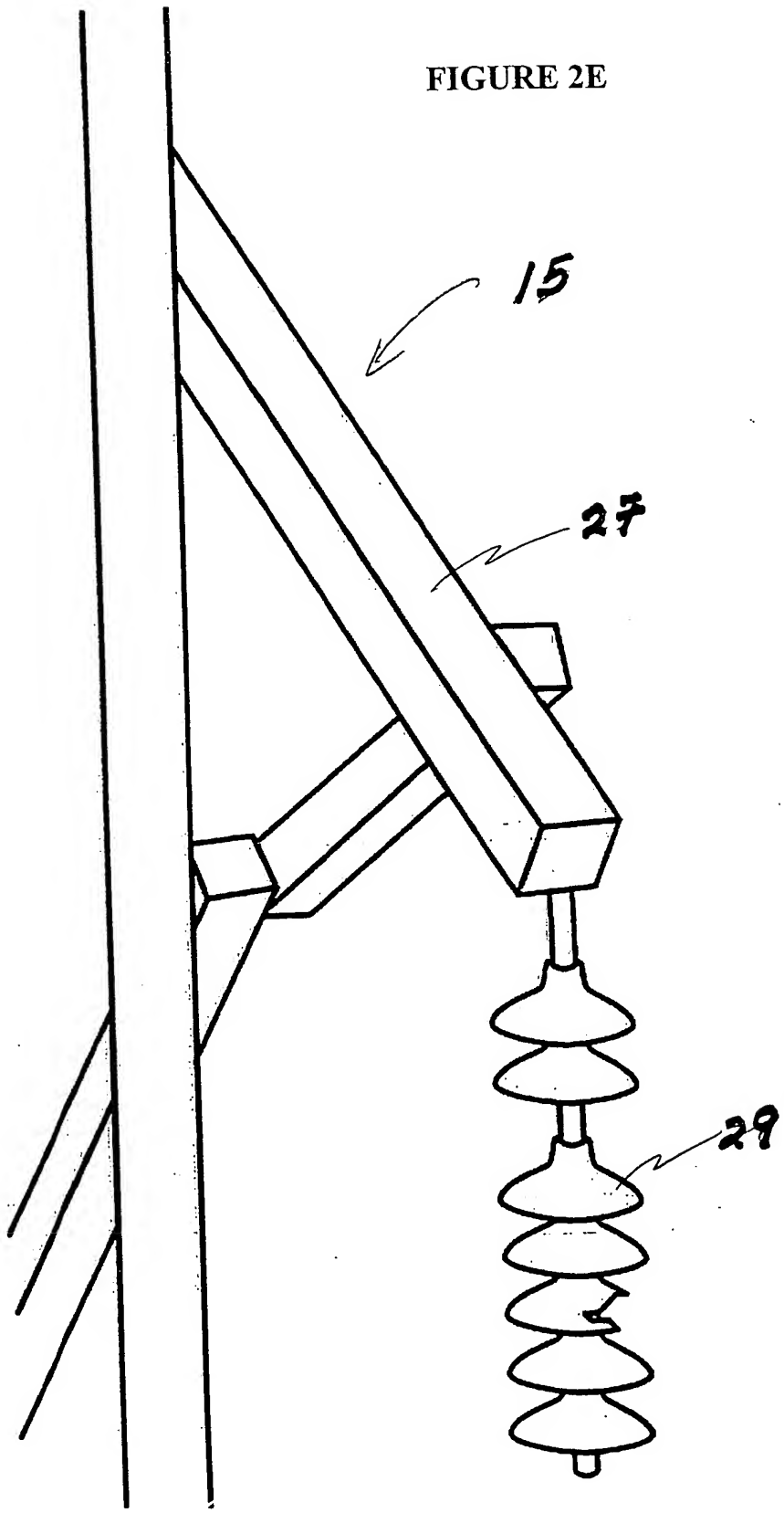


FIGURE 2D

FIGURE 2E



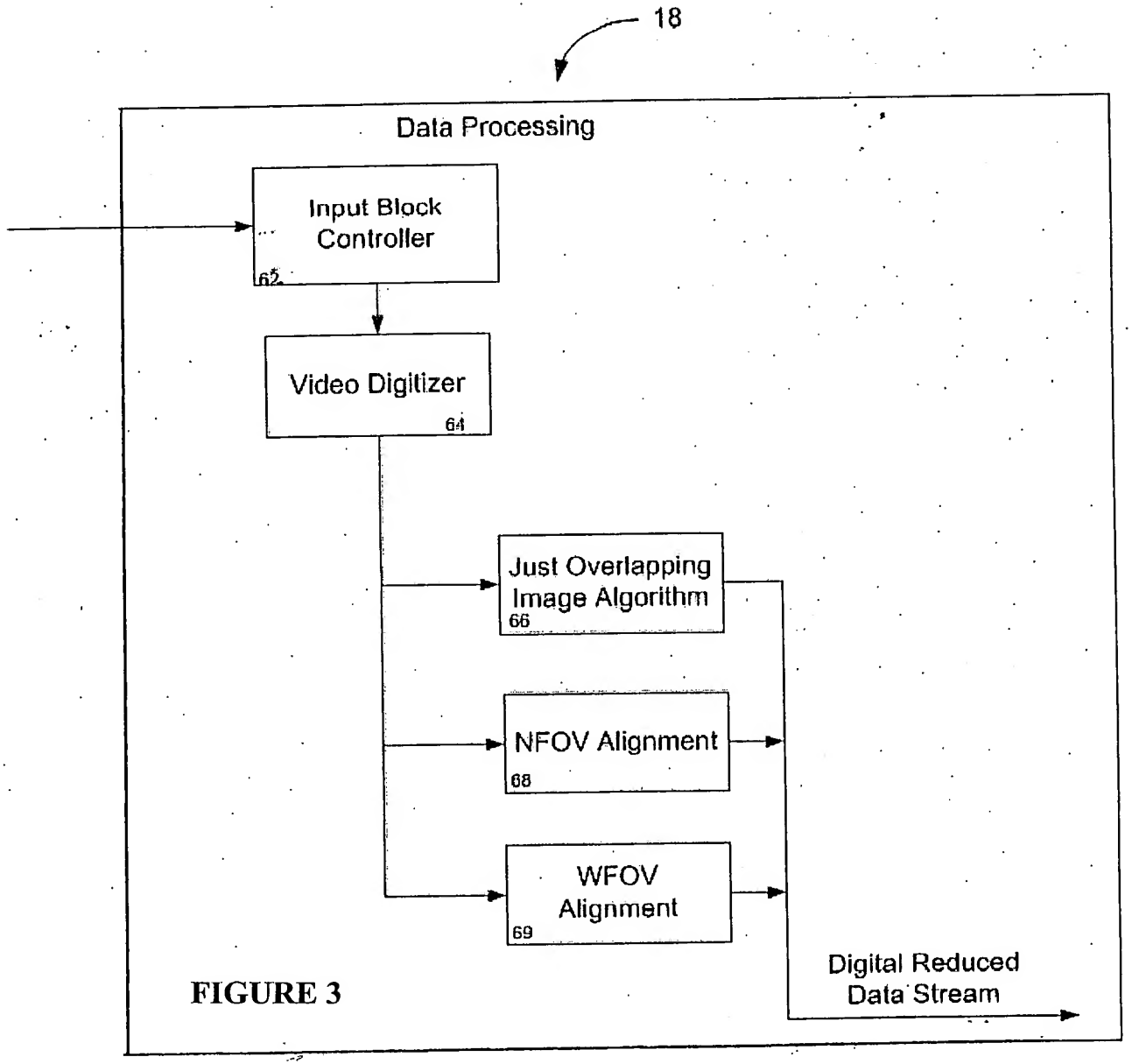

18
Data Processing
Input Block Controller
62
Video Digitizer
64
Just Overlapping Image Algorithm
66
NFOV Alignment
68
WFOV Alignment
69
Digital Reduced Data Stream

FIGURE 3

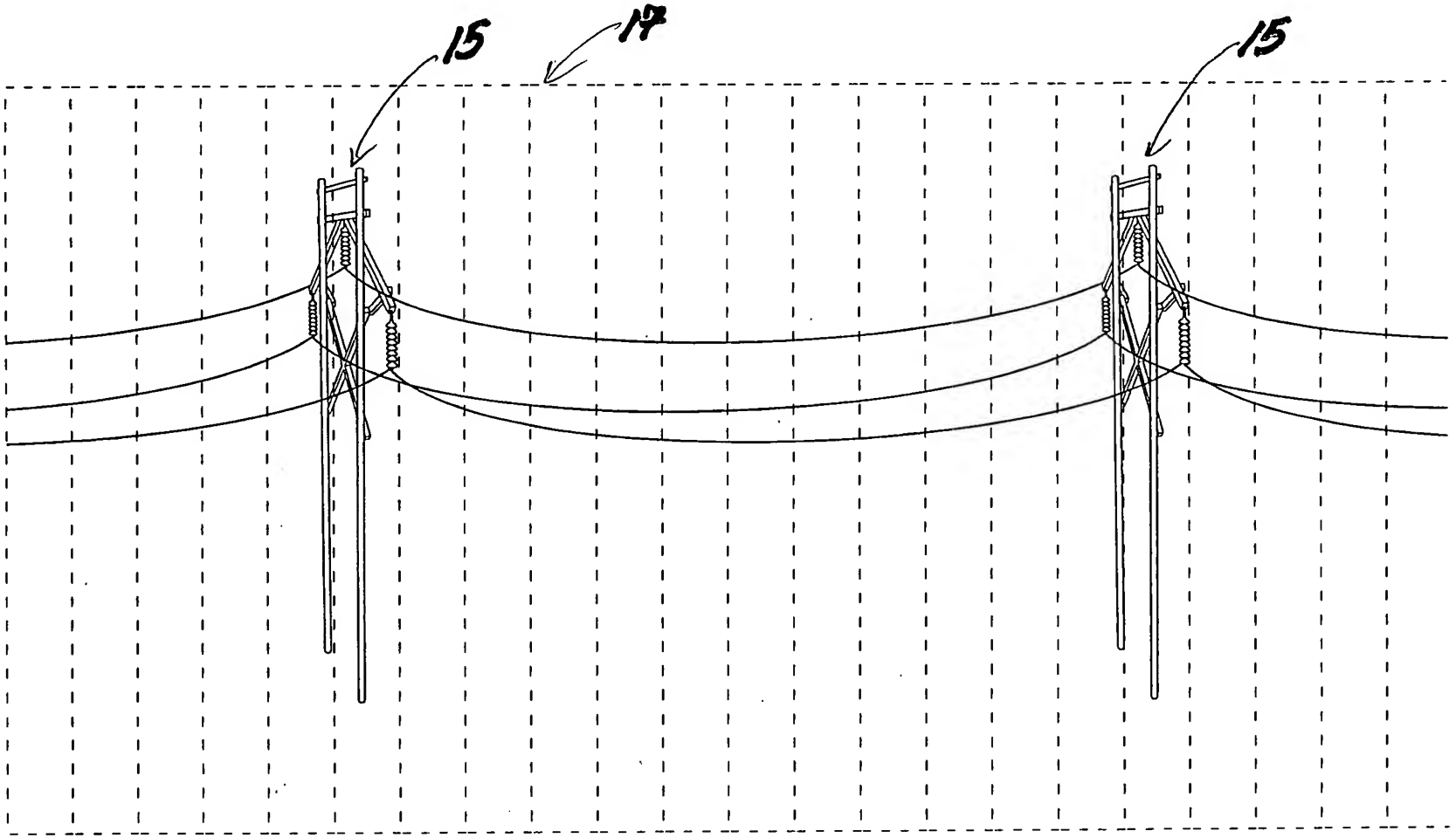


FIGURE 3A

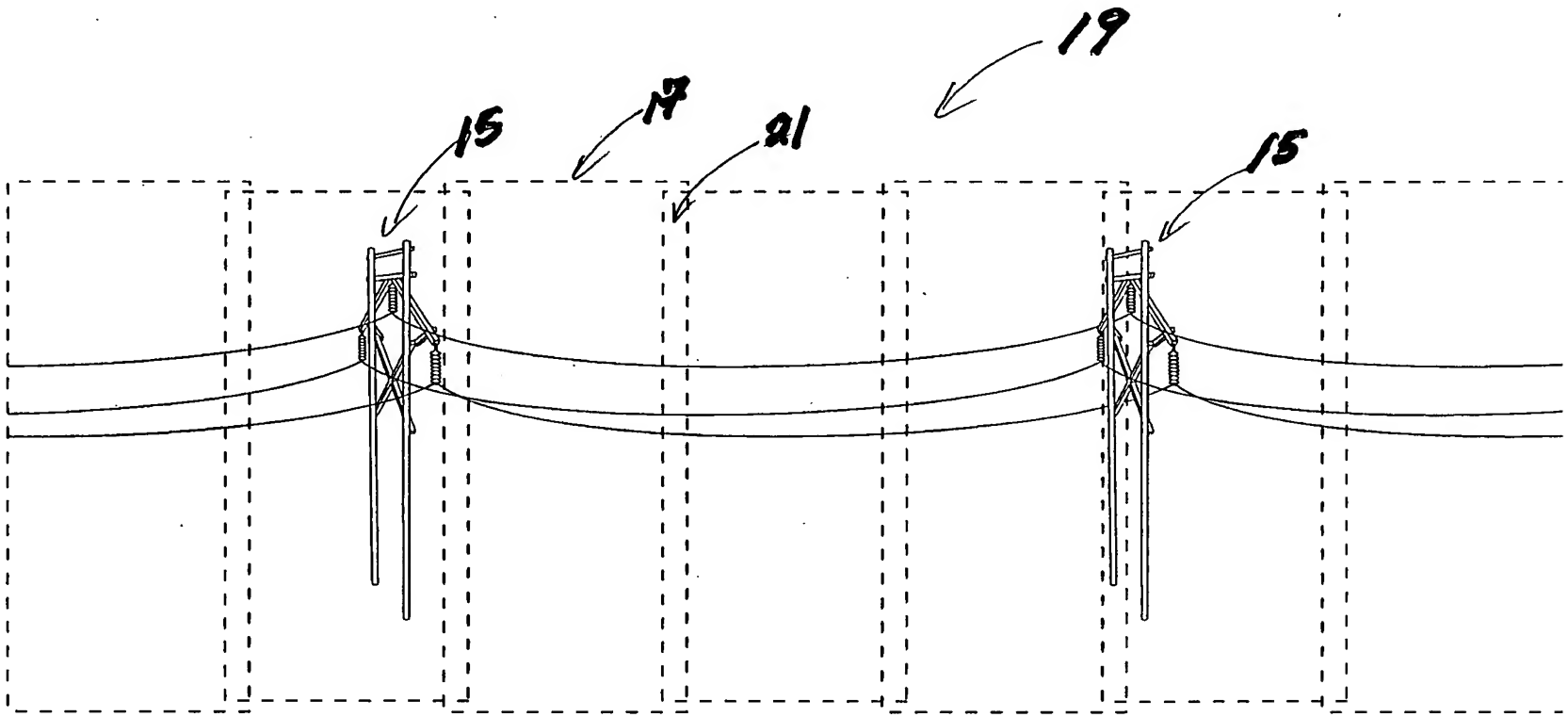


FIGURE 3B

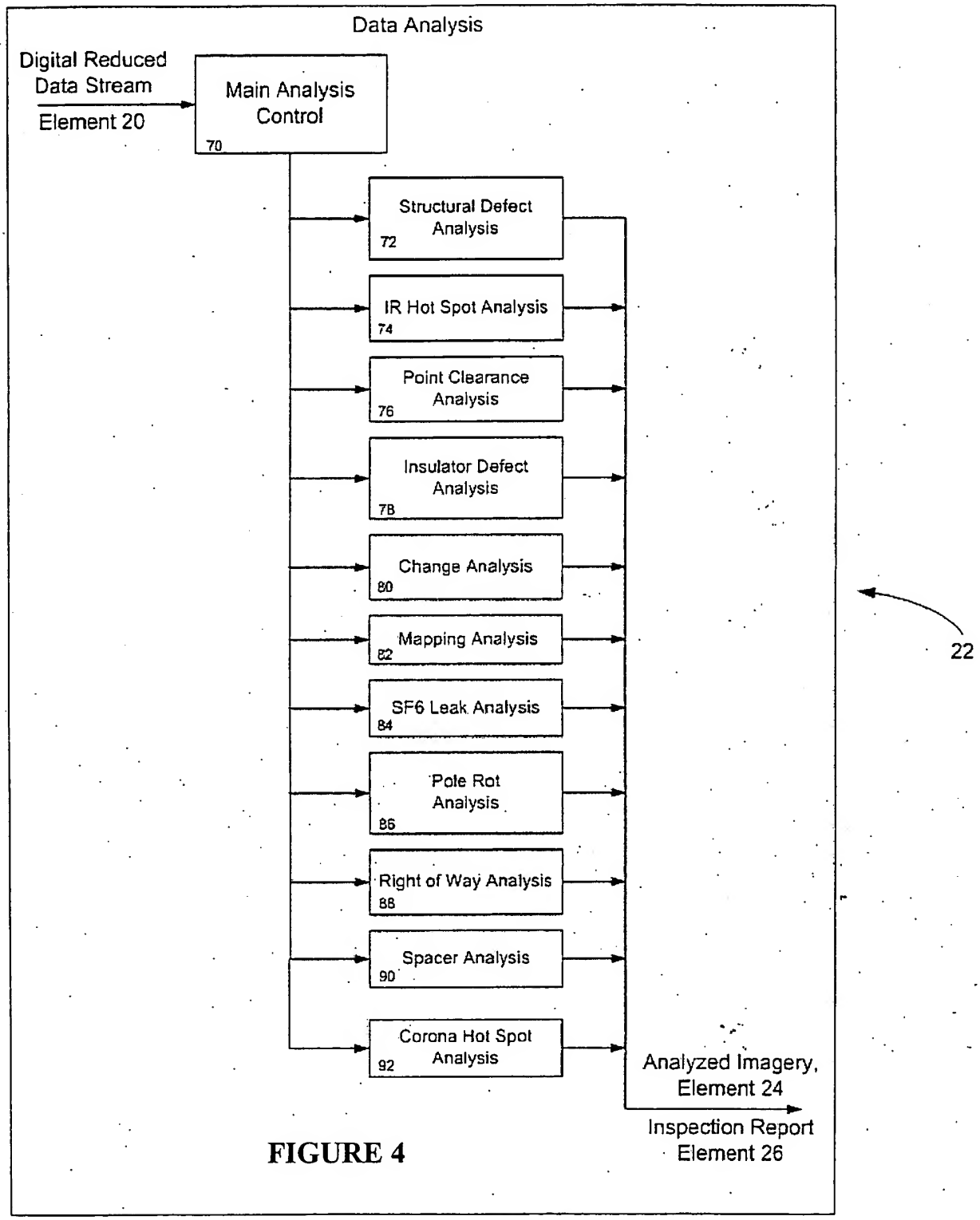

Data Analysis
Digital Reduced Data Stream
Element 20
Main Analysis Control
70
Structural Defect Analysis
72
IR Hot Spot Analysis
74
Point Clearance Analysis
76
Insulator Defect Analysis
78
Change Analysis
80
Mapping Analysis
82
SF6 Leak Analysis
84
Pole Rot Analysis
86
Right of Way Analysis
88
Spacer Analysis
90
Corona Hot Spot Analysis
92
Analyzed Imagery, Element 24
Inspection Report Element 26
22

FIGURE 4

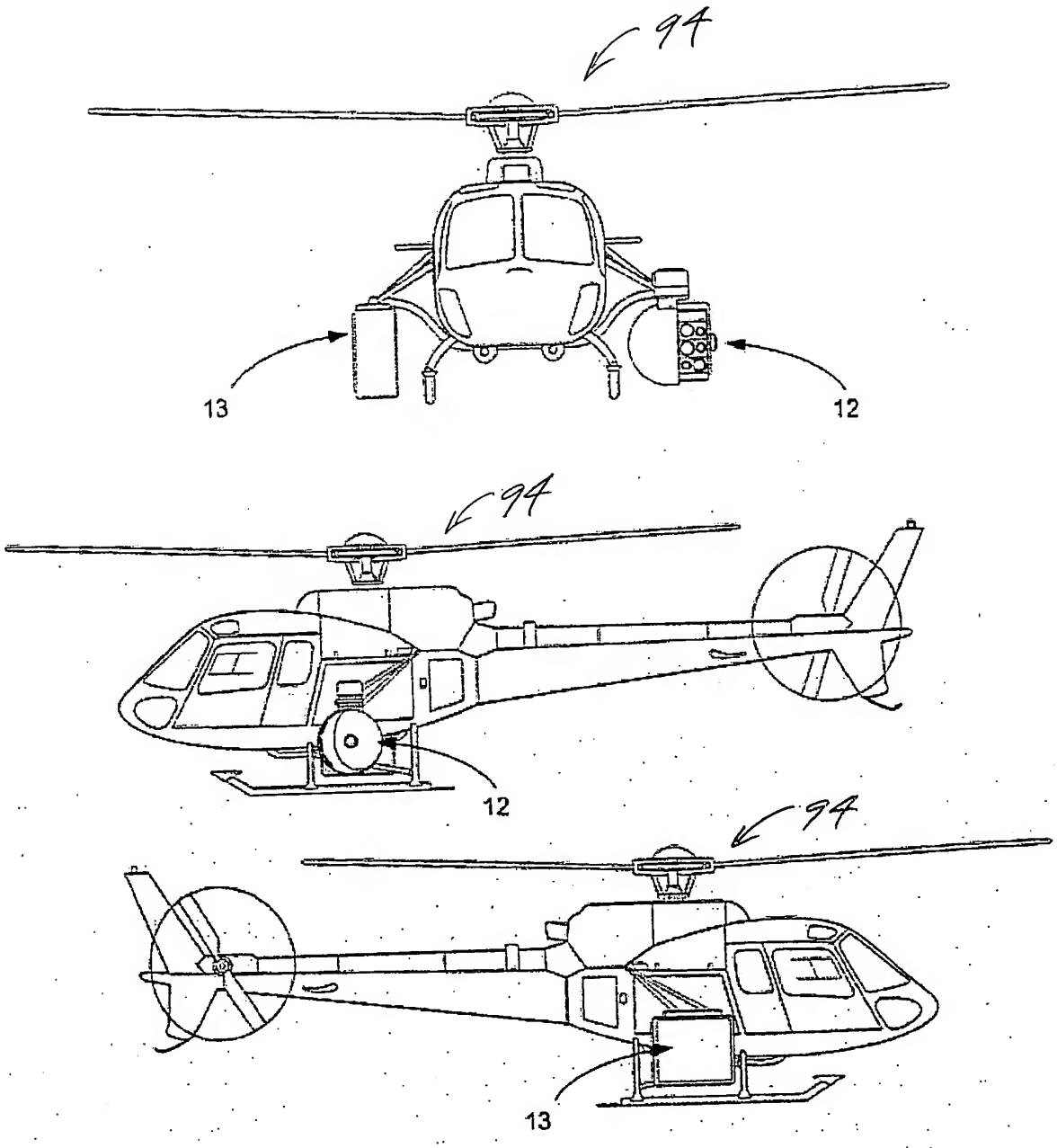


FIGURE 5